

CUSHING (C.)



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WITH COMMENTS.

BY

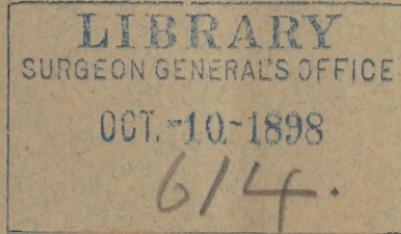
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SAN FRANCISCO,

Professor of Gynecology in Cooper Medical College, Fellow of the American Association of Obstetricians and Gynecologists, Fellow of the British Gynecological Society, Consulting Surgeon to the French Hospital, etc.

(READ BEFORE THE MEDICO-CHIRURGICAL SOCIETY OF SAN FRANCISCO, SEPTEMBER 3, 1894)

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—OR—
ABDOMINAL SURGERY,
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September 3d, 1894.)

In January, 1893, I was asked to see the wife of a medical man who had been suffering for several years with occasional attacks of fever accompanied by a disturbed condition of the digestion and by marked emaciation. Each attack lasted from six to ten weeks, the temperature varying from 100° to 105° . Following the attack she would slowly return to her normal state of health. There was no marked pain to indicate local disease, inability to take and digest food being the most pronounced feature.

Professors L. C. Lane and J. O. Hirschfelder saw the case in consultation, but aside from a diagnosis of chronic indigestion no decision was arrived at.

Upon examination the patient was found in no pain, much emaciated, and without distension of the abdomen. Abdominal and pelvic organs apparently normal; analysis of urine negative; heart and lungs in good condition; pulse weak. After the examination I told the husband that I was unable to form a definite opinion as to the nature of the case, but that the probability lay between a commencing tubercular peritonitis and a small collection of pus somewhere in the peritoneal cavity.

I advised an exploratory incision as the best means of settling the question. On February 4, 1893 (with the assistance of Prof. Steele) the abdomen was opened in the usual way be-

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low the umbilicus, in the linea alba, a hand and arm introduced and all the abdominal organs carefully examined. Everything was found normal except an enlarged gall-bladder filled with gall-stones, on the right side beneath the liver. I advised the removal of the bladder with the stones.

The opening in the central line was closed and the abdomen laid open just below the ribs on the right side, the gall-bladder drawn out and ligated close to the liver, and the whole removed. The recovery was uneventful, the fever disappeared, and since that time there has been no recurrence of the trouble.

A question of importance now comes up. What relation, if any, was there between the gall-stones and the fever and emaciation? If the gall-stones were the cause of the fever, it would appear to me probable that they produced a reflex irritation of the stomach and thereby an indigestion of a sufficiently severe character to account for the fever.

I am the more inclined to take this view on account of a similar experience six years ago in a case where I stitched the gall-bladder to the skin and drained it after removing a quantity of calculi. In this last case all the symptoms were at once removed by the operation. In both cases the gall-bladder could not be felt by palpation, and it was not suspected that there was any fault with this organ. In any event, the prompt relief of the symptoms, and the subsequent good health, leads me to the conclusion that the disorder of the gall-bladder was the cause of the sickness.

Since the existence of the gall-bladder is not essential to the health of the individual or to the function of the liver, I believe its removal, when diseased, is better surgery than to drain it, or to secure an artificial opening between it and the pylorus.

In April, 1893, I saw, in consultation with several well known surgeons, a case of stricture of the rectum in a woman 28 years of age, the mother of two children. The stricture was about a finger's length above the anus, and the contraction of the gut would not permit the introduction of the first joint of the finger. The consensus of opinion was that the disease was probably malignant, and the majority of those present

opposed any surgical procedures owing to the inaccessibility of the disease.

Prof. Lane and myself advised an operation on the ground of the youth of the patient and the possibility of a cure, and that the real facts in the matter could only be determined by an effort to remove the disease.

On April 22, 1893, with the assistance of Drs. Stillman and Rixford, I performed Kraske's operation, which consisted of the removal of the coccyx and the lower segment of the sacrum, the breaking up of the attachments of the sigmoid flexure of the colon to the pelvic wall, the drawing the detached gut down; the removal of six inches of gut, including all the diseased portion, leaving about two inches of the rectum next the anus *in situ* as it was apparently healthy.

The upper end of the gut was then drawn down and carefully sutured to the end next the anus and the large wound in the back closed with silkworm gut sutures. On account of the escape of some of the contents of the bowel between the stitches, suppuration took place in a portion of the wound. A small recto-vaginal fistula formed at the upper end of the vagina immediately behind the cervix; with the exception of the fistula, the wound healed readily, and she was enabled to return to her home at the end of two months much increased in weight and in good general health. She returned to San Francisco in November last when I closed the recto-vaginal fistula which healed readily. There was left at the site of the sutures a decided narrowing of the rectum, but the stricture permitted the passage of a Wales' soft rubber bougie an inch in diameter. At this time her physician writes me that after the lapse of fourteen months her general and local condition remain excellent.

A microscopical examination of the removed specimen demonstrated that it was an epithelioma.

One who has never witnessed this operation cannot easily conceive how thoroughly the parts are exposed to view as the operation proceeds, no vessels ligated, haemostatic forceps being sufficient. A large sponge with a cord attached was passed up into the pelvis and protected the intestines from injury. The disease was situated almost exactly in the center of the pelvis, and could be reached through an abdominal

opening only with the greatest difficulty, and from below only by sacrificing the lower end of the gut with its sphincters, unless as in this case the opening was made as Kraske advises. Had I to deal with a similar case in the future, I would make a trial of the Murphy button for uniting the ends of the gut, as much time would be thereby saved and the shock lessened. It is yet too soon to say that a permanent cure has been made, but the outlook is good and we have at least given the patient a year of comparative health, with good prospects of a continuance.

Mrs. G. H., the wife of a medical man and the mother of three children, applied to me for advice regarding an enlargement of the abdomen. She was in good general health except that she was unable to stand long on her feet without a feeling of weight, and a bearing down sensation in the lower part of the abdomen. She was about 36 years of age. An examination demonstrated a bad laceration of the cervix and perineum. There was marked hyperplasia of the uterus, and a smooth, elastic tumor in the region of the right ovary which was pronounced an ovarian cystic tumor, and an operation advised. On the 25th of February, 1893, the patient was placed under ether, the uterus thoroughly curetted, the laceration of the cervix and perineum repaired and afterwards the abdomen opened in the usual manner.

What was supposed to be an ovarian cyst proved to be a colloid cyst growing from the retroperitoneal tissue just below the right kidney and the inner wall of which was made up in large part of the outer wall of the ascending colon. The tumor was about the size of a child's head at term. The wall of the sac was covered by peritoneum about the thickness of cardboard.

The sac was tapped but the colloid mass had to be removed by the hand; manifestly the sac could not be removed without sacrificing or at least greatly endangering the wall of the colon, so the cut edges of the sac were stitched to the abdominal wall and a drainage tube inserted and fastened into the abdominal wound.

There was no shock and the recovery was uneventful. At the end of a year there was still a slight discharge from the

fistulous opening and the narrow tract was syringed out with a solution of nitrate of silver, 60 grains to the ounce, and the fistula then closed. The ovaries were found to be normal. The plastic operation on the cervix and perineum had yielded a perfect result.

I report this case, for retro-peritoneal tumors of this kind are uncommon, if we are to judge by the fact that we seldom see one reported in the medical journals. The error of diagnosis is easily understood when it is remembered that the cyst was movable and was in direct contact with the ovary, and that the patient's abdomen was well loaded with fat. However, mistakes in diagnosis in abdominal disease are so frequent that they have ceased to cause surprise.

Dr. Hennessy, of Napa, sent a woman to me February last with a history of pelvic inflammation ending in a discharge of pus from the rectum and from the bladder. She also passed gas from the bladder, from time to time. She was much emaciated and suffered a good deal from pain in the region of the left ovary. Upon examination an immovable and tender mass was found in the region of the left ovary, and the diagnosis was made of a pus tube opening both into the rectum and bladder.

On March 3, 1894, assisted by Dr. Hennessy, the abdomen was opened and the diagnosis verified. The whole left broad ligament was distended and filled with cheesy pus, and the remnants of a pus tube were in evidence. The tube was ligated with catgut and removed, and the pus cavity in the broad ligament thoroughly curetted and afterwards mopped out with a mixture of equal parts of carbolic acid and compound tincture of iodine, and a rubber drainage tube passed through from the abdominal wound into the vagina.

There is still a fistulous opening in the abdominal wall, but the patient has grown fat and hearty, and bids fair to make a perfect recovery. This case is somewhat out of the ordinary.

In this connection I would like to call the attention of the members of the Society to a practical matter of undoubted value, and which I put in practice for the first time in this case.

In order to avoid fistulous tracts caused by leaving in the abdomen silk ligatures that have become infected with pus, I prefer in pus cases to use catgut, but a serious objection to catgut is, that in handling it with wet hands, and when it is soiled with blood and pus, it becomes slippery, and when a knot is tied down in the bottom of the pelvis, I do not feel sure that it will hold.

It occurred to me that, if after the catgut had been kept in sulphuric ether for ten days in order to get all the animal oil out of it and render it aseptic, it were put into a mixture of an ounce of common rosin to a pint of alcohol, it would preserve the catgut and make it sticky so that it would stay tied, whether wet or not.

The experiment was a success, the catgut stayed tied, and I can recommend it as an improvement.

Two years and a half ago a patient, aged about 35, brought me a letter from Dr. Henry O. Marcy, of Boston, asking me to give her such attention as might be needed. She was exceedingly nervous, and was suffering from pain in the region of the ovaries. She was a widow and had never been pregnant. Upon examination the ovaries were found more than usually sensitive and slightly enlarged. I advised measures to improve the general health and the use of the continuous current of electricity to be passed through the ovarian region by means of large pads made of potter's clay. She did not return for treatment and I heard nothing more of her for two years. Last spring she came to my office again for advice, stating that after leaving me over two years ago, a surgeon had performed laparotomy and removed the left ovary and tube, but with no benefit to the troublesome symptoms.

Upon examination at this time she was found to have a ventral hernia the size of a small cocoanut in the line of the abdominal incision. The right ovary was about the size of a duck's egg and extremely tender, the right fallopian tube was enlarged to the size of one's thumb. Behind the uterus there was what appeared to be a mass of hard fecal matter in the rectum, which prevented my making a satisfactory examination, and I instructed her to go home and take a large rectal enema and to return for further examination.

Upon her return the mass was still felt in the same place, and a digital examination per rectum demonstrated the fact that the mass was in the lower part of Douglas's pouch, and through the thin wall of the gut, I could make out the outline of a round flattened mass, something like the end of a spool, but further consideration led me to the conclusion that it was a finger ring, and I so informed the patient.

She then told me that she had learned since the operation that a valuable ring had been lost at the time and that it had never been found. This only confirmed me in my original opinion that the mass in Douglas's pouch was a finger ring buried in lymph.

On May 24, 1894, assisted by Prof. C. N. Ellinwood and Dr E. W. Thomas, the abdomen was opened and the right ovary, which was a mass of cysts, and the enlarged fallopian tube were removed. An attempt was made to dissect out the mass in Douglas's pouch, but on account of the cartilaginous hardness and the imminent danger of making an opening into the rectum, the effort was for the moment abandoned. The fibrous sheath of the rectus muscle was next dissected free along the edge of the incision in the abdomen and, after the usual sutures of silkworm gut were introduced through all the tissues composing the wall, interrupted buried sutures of heavy silk were used to bring together the fibrous layers that had been dissected out, and finally all the structures were brought together by the deep sutures of silkworm gut, the buried sutures being introduced to prevent, if possible, the recurrence of the hernia. The patient was then turned upon her side and Douglas's pouch laid open from below, when the gold ring with an emerald setting, as bright and clean as the day it was made, came into view, and with a pair of strong forceps and long-handled scissors was quickly removed from a firm bed of lymph where it had laid for two years. As a consequence of the dissection a rather free hemorrhage followed, and a sponge in the grasp of a long-handled forceps was left in the opening for six hours, which effectually controlled the bleeding. The recovery was slow but uneventful, and she left the hospital at the end of four weeks. I am confident she will now be restored to health.

It is of interest to know that so small a body could be de-

tected after being in the peritoneal cavity for over two years, but this can be understood when it is remembered how thin the rectal wall is.

Had she been free of the ovarian and tubal disease, and not suffering from hernia, I doubt that the simple presence of the encapsulated ring would have warranted a serious operation for its removal. Nevertheless Douglas's pouch is one of the most sensitive points in the human body, as can be proved by passing a sponge down upon it during an abdominal operation. Other manipulations are borne without a sign of suffering, but if Douglas's pouch is touched, the patient begins to struggle.

The following case is reported by Dr. Rixford, and is a valuable contribution to the literature of abdominal surgery, for it illustrates some of the difficulties attending diagnosis, and shows what may be done in the way of exploratory incision in serious conditions, without causing untoward symptoms:

"R. L. Jump, a physician, had enjoyed generally good health. On April 18th, he felt perfectly well, though for ten days or so previously he had been troubled with constipation, a very unusual condition for him. During the night of April 19th, he had abdominal pain, sufficient to keep him from sleeping, situated in the right iliac and umbilical regions. The pain was constant, and resembled that experienced in several similar attacks which occurred during the last three years, though it was not so severe. In one of these attacks the pain persisted a week or more. During the evening of April 20th, he was slightly feverish, and more so the following evening. Sunday morning he felt well and walked to the ferry, but by night he was feeling badly and chilly, and had a temperature of 102.5 by the mouth. He took ten grains of calomel and confined himself to milk diet, but did not go to bed.

The temperature came down to 99.8 on the 23rd, to 99.5 on the 24th, but rose again on the 25th to 100.5. He took a second dose of calomel after which the temperature fell to 99. On the 26th, 27th and 28th he took long buggy rides and felt well. Friday, the 27th, the temperature was normal night and morning, and continued so for three days. During this week, from the 23rd to the 30th, he had no pain.

On Saturday, the 28th, he returned to the city feeling well. Sunday he felt as well as ever, and ate with relish meat and vegetables. That night he slept well. On Monday afternoon, April 30th, he began to feel badly again; he had some uneasiness in the abdomen, but ate as usual. Temperature 102. Next morning he took an ounce of Rochelle salts, vomiting part of it. That night he took calomel, grs. v., in divided doses. Temperature 103. He passed a sleepless night, and Wednesday morning, May 2d, went across the bay. The abdominal pain had returned worse than before. Temperature 104. At times he complained bitterly of the pain, and asked for an exploratory incision.

On Thursday, May 3rd, the temperature reached 105, followed by a remission to 102 Friday morning. Five grains of phenacetine brought the temperature down to 101.5. The pain was so severe that morphia was given. On this day there were several fluid stools, which were thought to be due to the beef extracts with which he had been fed for two days.

The rectus muscle on the right side was quite rigid, and a decided tumefaction was felt just below and to the right of the umbilicus. The point was very tender on pressure. There was moderate tympanites. One year and a half ago he had had an extensive pelvic abscess, which was incised deeply through the perineum. In view of these facts, together with the patient's request, and the history of several attacks of abdominal pain mentioned above, and the rapidly increasing severity of the symptoms, the attendants decided upon an exploratory incision, it being thought that there was present an abscess probably of appendical origin.

On Saturday afternoon, the 5th, Dr. Cushing, assisted by Drs. Stillman, Rixford and Huffaker, made an abdominal section through the body of the rectus muscle immediately over the tumor. The appendix appeared in the wound and was quite normal. The lower eight inches of the ilium were moderately congested, and in violent peristalsis. The mesenteric glands of this region were greatly swollen, some being as large as almonds, and of a purple color. The total mass of the glands was sufficient to be felt through the abdominal wall, and account for the tumor. One of the glands was shelled out for examination.

The case was evidently one of typhoid fever in spite of the clinical history. Typhoid fever had been discussed several times before the operation, and was strongly suggested by the rapidly increasing fever and fluid stools of May 4th, but it was excluded on considering the history of previous abdominal trouble, the period of defervescence and return to normal health, the severe pain, the excessive tenderness, the muscular spasm, the chills, and the absence of the typhoid eruption and stupor, for the mind was bright as ever.

There was considerable dark-colored fluid in the peritoneal cavity. A glass drain was inserted. The wound was closed with silkworm gut sutures and dressed with carbolic acid and glycerine. There was no shock following the operation, and no vomiting.

Soon after the operation delirium became profound, and continued to May 18th. It was peculiar in that the patient knew those about him, and offered rational suggestions concerning his treatment.

On the next day after the operation the patient's pupils began to dilate, and the dilatation soon became extreme. Then strabismus occurred, lasting several days. The head was retracted, and a certain degree of opisthotonus was present. With these symptoms the pulse rate increased to 120 and 140. Subsultus tendinum was excessive. Beginning as usual in the hands, it extended seemingly to every muscle in the body. The arms and legs were thrown about, and the thoracic and abdominal muscles contracted spasmodically.

The drainage tube was withdrawn after forty-eight hours, and the stitches were removed on the fifth day, the wound having healed by complete primary union. On the sixth day, while the attendant's back was turned, he tore off the adhesive strips and opened the lower third of the wound. No evil resulted other than the somewhat delayed healing by granulation of this portion of the wound.

Tympanites was excessive at times. The typhoid eruption appeared after the operation, and was marked on the abdomen and chest, and a few petechiae were present even on the extremities.

At no time was the diarrhoea excessive, nor was there blood in the stools. Prostration was extreme, and the discharges

were involuntary for a week or more. The greatest care was necessary to prevent the formation of bedsores, and, notwithstanding the patient was turned from one position to another every twenty minutes, and air cushions and cotton rolls were used, several small bedsores did form.

The temperature, taken by the rectum, ranged from 102 to 105 from May 2nd to 14th, when decided remissions took place, and defervescence set in. On May 21st the temperature was 99, and thereafter remained normal. Great distress was caused by drying of the secretions of the throat. Several times complete casts of the pharynx had to be forcibly dislodged.

The case is remarkable in a number of respects. Few cases of typhoid are accurately observed at as early a date as this. There occurred an interval of complete defervescence following vigorous purgation with calomel, and restriction to a milk diet, and complete return to health for three days. After this, the fever rose rapidly, but continuously, for four days. Several explanations of this have been suggested; one, that the disease really began about April 19th, and that by the prompt administration of calomel it was aborted, to be lighted up afresh on too early return to ordinary diet. Another is, that the symptoms were due to an error in diet during the prodromal stage, and were relieved by the removal of fermenting intestinal contents by the calomel.

The exploratory incision yielded a number of valuable observations besides those mentioned, viz: the localized congestion, the violent peristalsis, the dark fluid in the cavity, the enlargement of the mesenteric glands early in the disease. Dr. S. M. Mouser, to whom was submitted the excised mesenteric gland, reported that Esmarck tubes inoculated from it showed only the typhoid bacillus in pure culture. This fact is almost proof positive against ulceration of the intestines having occurred, for a break in the continuity of the mucous membrane gives entrance to a variety of bacteria with which the intestinal contents swarm. From the violence of the peristalsis in the lower end of the ilium as the coil lay exposed, the explanation of the colicky pain was evident.

The remarkably severe nervous symptoms deserve some .

attention; meningitis and frightful subsultus and violent delirium which made it at times most difficult to give the patient food. All this in a case which progressed to convalescence without the slightest evidence of intestinal ulceration, and which was followed by a rapid return to perfect health, once convalescence was established."

Dr. Jump is Assistant Demonstrator of Anatomy in Cooper Medical College, and a most enthusiastic and thorough student of his subject. Believing that he was suffering from appendicular trouble, and knowing the dangers attendant upon it, he insisted that an exploratory incision be made without delay. He said, "If I should die without operation, and it be found that the disease could have been removed by surgical means, I want put on my tombstone, 'A Victim of Conservative Surgery.' "

